Elmore County Landowner Uses Computer Technology to Manage Forestland

WETERINARIAN Robert Parker of Millbrook owns property in east Elmore County on which he is planting a wide variety of timber, flowers and legumes as part of the Alabama TREA-SURE Forest program. With help from his family and a student-employee from the Private Forest Management Team at Auburn University, Dr. Parker has transformed fallow cotton fields into a quilt-like landscape of wildlife, timber, crops and wildflower stands.

The result is a complex ecosystem that he diligently maintains and will unveil to landowners across Alabama during the 2000 Alabama Landowner and TREA-SURE Forest Conference via a specialized computer software program called FARMS Manage-It![©].

Dr. Parker inherited a tract of land on the west side of Elmore county from his father. In the early 1970s, the Alabama Forestry Commission approached him to become one of the first members of what was to become the Alabama TREASURE Forest Association. "They had approached several local landowners," recalls Dr. Parker. "They talked about responsible land stewardship and preservation; I thought it was a worthwhile cause and joined the program."

Later, Dr. Parker traded that parcel of land for most of his 500-acre site just south of Wetumpka, Alabama, in the community of Ware. Dr. Parker says, "It was a good trade. The land had timber on it which brought the value up, but I did not initially think of it in terms of timber production." He simply enjoyed working on the property and planned to develop it for hunting, family recreation, and maybe later, timber.

Computer Used as Management Tool

TREASURE Forest landowners are required to identify one primary and at least one secondary management objective for their property. Dr. Parker selected wildlife and timber production initially, but has since informally worked the goals of recreation, aesthetics, and environmen-

tal education into his overall plan.

His property originally consisted of a series of cotton fields along the Tallapoosa River, divided by stands of pine trees. "As the cotton fields were picked, I would replant them with food plots and green fields," says Dr. Parker. Although his efforts to reclaim the land began gradually, he now manages 50 to 60 acres of pine, 55 acres of oaks, a tree identification area that includes a mix of more than 25 species of trees, over 20 varieties of oak trees, plus 10 acres of corn planted in five separate patches, tree stands, wildflower tracts, tall grass green fields, 25 wildlife food plots for deer and quail, a series of beehives, a catfish pond, and much more.

Translating this much diversity into a written management plan was an overwhelming task. "I enjoy keeping detailed records of what I have planted, where and when, so that 10 years from now I or anyone can identify what has been done," says Dr. Parker. Increasingly, his property was becoming more complex and the task

Dr. Robert Parker will host the 2000 Landowner and TREASURE Forest Conference tour on his property in Elmore County.

of maintaining records more daunting.

At a meeting of the Elmore County Chapter of the Alabama TREASURE Forest Association in the late summer of 1999, Dr. Parker was introduced to FARMS Manage-It!® software, developed by George Barker, a registered forester, and his wife Karen Barker, a computer programmer.

FARMS® was developed by Natural Resource Technologies, L.L.C. (NRT), for private landowners, hunters, conservationists and anyone with the need to manage one or several tracts of land.
FARMS® allows landowners to build custom maps and reports on their property. Using scanned images of plat maps, aerial photographs, etc., they can "see" every inch of their property and add features right on the computer screen. As the maps are built, FARMS® automatically creates a database of correlated information for reports and trend analysis.

For instance, Dr. Parker and his sons can track the feeding movements of deer and plot tree stands in key locations for better harvesting. Timberland can be categorized by type and age to forecast thinning as well as planting schedules. Records can also be kept of the species of wildlife living in the area, or the flora and fauna native to the land.

Dr. Parker remembers, "I had never seen a product like that before. It would allow me to map all of my small fields, plots and stands, and keep detailed records on each." Land management programs for private landowners are rare and once Dr. Parker saw the capabilities, he was sold.

Starting with an aerial photograph of his property, the Barkers scanned it into Dr. Parker's copy of the FARMS® software. They also installed FARMS® onto a laptop computer so that Dr. Parker could work with it at his office, his home or on location at his property.

Once the map was on the computer screen, Dr. Parker began segmenting his property. He explains, "I outlined the different stands and assigned each a name,

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such as the 'Pond Loblollies,' 'Pond Sunflower Field,' and 'Pond Hardwoods.' Then I went back and entered the details on each stand. For example, I recorded when I planted the pines along the road to the cabin when it was just a path." Placing features on a map is easy with FARMS® because users can either approximate the locations of boundaries, groves, roads, etc., or import exact coordinates from a Global Positioning System (GPS).

Dr. Parker doesn't consider himself computer savvy, but he found the FARMS® software easy to use and caught on quickly. "With the hectic schedule of a veterinary practice, I don't have a lot of time, and it probably took me a total of three weeks to enter all the basic information on my property."

As the diversity of his TREASURE Forest increased, FARMS® enabled him to keep up with everything that was going on. Dr. Parker says, "With all of the little fields to keep up with, it's perfect. I know when, where, and what I planted so that I can track growth rates. For example, this year I planted 300 chestnut trees and intend to plant a California white oak later. Every note is documented. I even used FARMS® to locate sandy sites where I planted longleaf pines."

In addition to managing timber, Dr. Parker uses his computer to monitor wildlife on his property. A participant in the Department of Conservation's Deer Management Program, Dr. Parker monitors food plots and harvesting. "I record my tree stands and the animals harvested each season. I've mapped where I've planted Alfa Graze and Alfa Rack feeding plots for deer, chufas for turkey, and lespedeza for quail." FARMS© allows Dr. Parker to see these areas and determine where the deer are feeding. Comparing harvesting information from one season to another shows Dr. Parker how his deer population is prospering in terms of body weight, age class and buck-to-doe ratios.

Property Used to Educate Others

Dr. Parker's property is such a diverse landscape that it is often used for educational purposes. "Adults and students in grade school should have a place where they can learn about trees, see differences in growth rates and generally enjoy the outdoors," says Dr. Parker. One of his long-term goals for the property is filling the educational needs of future generations.

Alabama TREASURE Forest Association members have toured his property in the past. Currently, Dr. Parker is preparing to host his largest tour ever, 400 to 500 statewide visitors participating in the October Landowner and TREA-SURE Forest Conference. The visitors will see first hand the TREASURE Forest Dr. Parker has created. Using FARMS®, Dr. Parker plans to provide each visitor with a map of his property that identifies the important features along the tour route.

As a member of the Alabama TREA-SURE Forest Association and president of the Elmore County chapter, Dr. Parker is among the private forest landowners who own 95 percent of Alabama's forests. "I could sit down and spend my time watching television," recognizes Dr. Parker, "but I would rather spend that time working out here and at the end of the day I will have all this to show for it."

The Elmore County Chapter of the Alabama TREASURE Forest Association can be reached at (334) 567-6301. More information or a free demonstration copy of the FARMS® software can be acquired by: calling NRT at (334) 252-0744 or toll free at 888-848-2146; by writing to NRT at P.O. Box 780603, Tallassee, Alabama 36078-0603; or by visiting the NRT web site at www.nrtech.com.

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zero-funded SIP. As of publication date, Congress is still deliberating the final numbers.

The NASF represents the directors of the state forestry agencies from all 50 states, eight U.S. territories, and the District of Columbia. The member agencies help deliver the Forest Stewardship Program and provide other management and technical assistance to private landowners as well. Further information about the state foresters and the landowner assistance programs that they support can be found on the web (www.stateforesters.org). The Forest Stewardship Program study can also be found in its entirety on the web

(www.rtp.srs.fs.fed.us/econ/pubs/jde001. htm). $\hat{\phi}$

Forestry Commission Web Page: www.forestry.state.al.us

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Alabama's Seaport

Another leading player in the movement of forest products abroad is the Alabama State Docks. In 1999, this state-owned operation led all other U.S. ports in the shipment of forest products and it handled more forest products than any other type of cargo through its terminals. Significant investments in forest product terminals, warehouse facilities, and the location of key shippers in the U.S. Southeast led to the dominant position of the state docks in this sector.

Outlook

Expect exports to make an even bigger impact on Alabama's forest product industry and our state docks. The reasons are simple. Over 95 percent of the world's population is outside of the United States. Consumers worldwide pre-

fer products made from natural wood for the home and office. Increasingly, they want to know that the products originate from renewable forests.

There's no better place to shop than Alabama. It's in the middle of one of the great wood baskets of the world, where foreign buyers continue to discover one of our best kept secrets—ownership of Alabama's timberlands is in private hands.

Alabama's forest landowners are a critical, first link to these worldwide consumers. As foreign markets for Alabamamade wood products grow, so will the trees. For the foreign buyer and the Alabama supplier, having a long term, reliable source of supply is the foundation for export success.

The next time a newspaper article touts the volume of autos exported from Alabama, remember that you may have a piece of one of the biggest export industries growing right in your own forest.